

WHAT IS CLAIMED IS:

1. A method of producing fine particles of an oxide of a metal, comprising the steps of:

preparing an acidic solution which contains ions of said metal;

precipitating fine particles of a hydroxide of said metal by adding an alkaline solution to said acidic solution;

collecting said fine particles of said hydroxide of said metal precipitated in a mixed solution of said acidic solution and said alkaline solution;

mixing fine particles of a carbon with the collected fine particles of said hydroxide of said metal; and

heat-treating a mixture of said fine particles of said hydroxide of said metal and said fine particles of said carbon at a predetermined temperature in a non-reducing atmosphere, whereby said fine particles of said oxide of said metal are produced.

2. A method according to claim 1, wherein said fine particles of said carbon are mixed with said fine particles of said hydroxide of said metal in a proportion of not less than 1.5 % by mass with respect to said fine particles of said hydroxide of said metal.

3. A method according to claim 1, wherein said fine particles of said carbon have a primary grain size of 1-50 nm.

4. A method according to claim 1, wherein said fine particles of said carbon has a turbostratic structure.

5. A method according to claim 1, wherein said metal consists of at least one element selected from the group consisting of silicon, manganese, zirconium, chromium, iron, nickel, tin, zinc, indium, aluminum, cerium, magnesium, and titanium.

6. A method according to claim 1, wherein said step of preparing said acidic solution comprises a step of dissolving a salt of said metal in a solvent.

7. A method according to claim 6, wherein said salt of said metal is selected from the group consisting of nitrate, carbonate, sulfate, acetate and chloride.

8. A method according to claim 1, wherein said alkaline solution is an ammonia water.

9. A method according to claim 1, wherein said predetermined temperature at which said step of heat-treating said mixture is effected is selected within a range of 500-1000°C.